

# **Data Discovery & Access**

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## **Discovery**

- Datasets only
  - GCMD for datasets
    - GES DISC uses GCMD as dataset catalog
  - Google
- Datasets and files
  - ECHO / WIST for datasets & files
    - Optimized for precise searches, ordering
    - http://wist.echo.nasa.gov
  - Mirador for datasets and files
    - Optimized for speed and simplicity
    - http://mirador.gsfc.nasa.gov
  - WHOM Web Hierarchical Ordering Mechanism
    - Deprecated: functionality subsumed into Mirador
- Giovanni (kind of...to be discussed later)



### **Mirador**

- Designed for simplicity and speed
- Emulates Google, uses Google parts

SEARCH MIRADOR	
Keyword:	Location:
Advanced Search  From:  To:	Search GES-DISC



## **Mirador Projects Tab**

#### Emulates WHOM hierarchical interface

- Coming soon: Parameters tab
- Also a technology infusion example: semantic web

You are here: Project

Projects Keyv			ords
Project	Description	Start Year	End Year
A-Train	Collocated with CloudSat subsets of MODIS/Aqua, AMSR-E/Aqua, OMI/Aura, and POLDER/PARASOL.	2004	2009
AIRS	The Atmospheric Infrared Sounder (AIRS) is a facility instrument aboard the second Earth Observing System (EOS) polar-orbiting platform, EOS Aqua. In combination with the Advanced Microwave Sounding Unit (AMSU) and the Humidity Sounder for Brazil (HSB), AIRS constitutes an innovative atmospheric sounding group of visible, infrared, and microwave sensors. Global coverage will be obtained twice daily (day and night) on a 1:30pm sun synchronous orbit from a 705-km altitude. For processing convenience, the data is divided into 6-minute files for Level 1 and 2 data.	2002	2009
GLDAS	The Global Land Data Assimilation System (GLDAS) is generating a series of land surface state (e.g., soil moisture and surface temperature) and flux (e.g., evaporation and sensible heat flux) products simulated by four land surface models (CLM, Mosaic, Noah and VIC).	1979	2009



### **Mirador Access to Services**

- Direct access to NetCDF conversion
- User interface for subsetting
- Access to OPeNDAP
- Access to KML (coming soon)



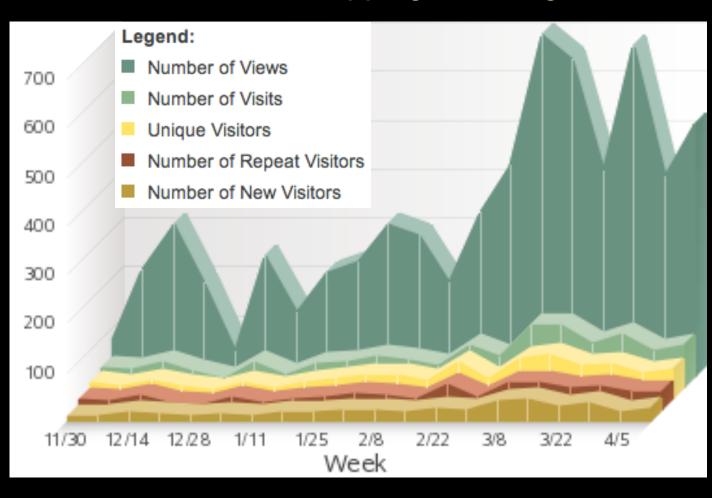
## Mirador does not yet offer...

- Access to Giovanni
  - Products vs. parameters issue
- Access to WMS
  - Use as browse?
- Search for data outside GES DISC
- True coincident search
  - "Find all cases where TRMM orbits coincide with AIRS swath granules, within a given space-time tolerance"



## **Recent Mirador Metrics**

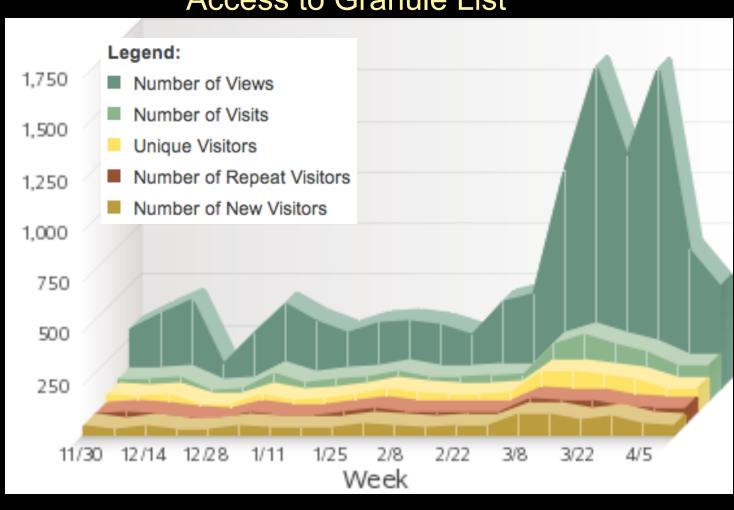
#### Access to Shopping Cart Page





## **Recent Mirador Metrics**

#### Access to Granule List





## **Issue: Getting User Input**

- Feedback mechanism yielded little useful input
- GES DISC scientists help
  - but too knowledgeable about holdings and access mechanisms
- Ideally would like a "user panel" or cadre of beta users...
- Suggestions?



#### **Data Access**

- EOSDIS Evolution drove a low-cost, radically simplified solution
- S4PA:
  - Simple, Scalable, Script-based Science Product Archive
  - All data are online
    - Public data on anonymous FTP
    - Restricted data available through HTTP
    - No orders, ergo no order tracking, ergo minimal dependence on database, ergo much cheaper, simpler system
  - Data stored in "Data Pool-like" hierarchical directories
    - Organized by data time



### **Discussion**

- Other useful methods of:
  - Discovery?
  - Access?
- User Feedback
  - How to get more / better?
  - Beta user panel?



# **Backup Slides**



### **Mirador Features**

- Space-time hit estimator for datasets
- Search by location name
- Search on geophysical event (e.g. Hurricane Katrina)
- Data availability calendars (Projects Tab only)
- Descriptive filenames
- Multiple batch download methods
  - Java downloader application
  - URL List
  - DownThemAll
  - FTP script
- Orbit number search (TRMM only)